

LIST OF CONTENTS

VOLUME 42, NUMBER 1, 1989

- | | <i>Articles</i> | |
|---|-----------------|--|
| S. C. Mullick and S. K. Nanda
(India) | 1 | An improved technique for computing the heat loss factor of a tubular absorber |
| A. Esteves and C. de Rosa
(Argentina) | 9 | A simple method for correcting the solar radiation readings of a Robitzsch-type pyranometer |
| M. T. Katzman (USA) | 15 | Assessing regional wind energy resources with biological indicators: a decision-analytic approach |
| M. Yanadori and T. Masuda
(Japan) | 27 | Heat transfer study on a heat storage container with a phase change material. (Part 2. Heat transfer in the melting process in a cylindrical heat storage container) |
| J. M. Gordon and T. A. Reddy
(Israel) | 35 | Stationary statistics and sequential properties of normal beam and global surface radiation on tilted surfaces |
| J. K. Nayak, S. P. Sukhatme, R. G. Limaye, and S. V. Bopshetty (India) | 45 | Performance studies on solar concrete collectors |
| M. S. Bohn and H. J. Green
(USA) | 57 | Heat transfer in molten salt direct absorption receivers |
| C. Riordan, D. Myers, M. Rymes, R. Hulstrom, W. Marion, C. Jennings, and C. Whitaker (USA) | 67 | Spectral solar radiation data base at SERI |
| N. Al-Hamdani, M. Al-Riahi, and K. Tahir (Iraq) | 81 | Estimation of the diffuse fraction of daily and monthly average global radiation for Fudhaliyah, Baghdad (Iraq) |

Book Reviews

- | | | |
|-------------------------------------|----|--|
| John Twidell (Glasgow) | 87 | Wind Energy Data for India by A. Mani and P. A. Mooley |
| Chris Mattingly (Birmingham) | 87 | Solar Thermal Energy Storage by H. P. Garg, S. C. Mullick, and A. K. Bhargava |
| James Hedstrom (Los Alamos) | 88 | A European Transient Simulation Model for Thermal Solar Systems by W. L. Dutre |

VOLUME 42, NUMBER 2, 1989

- | | <i>Articles</i> | |
|---|-----------------|---|
| M. M. Elsayed (Saudi Arabia) | 89 | Optimum orientation of absorber plates |
| E. F. Passos, J. F. Escobedo
(Brasil) and
F. Meunier (France) | 103 | Simulation of an intermittent adsorptive solar cooling system |

J. W. Mitchell and W. A. Beckman (<i>U.S.A.</i>)	113 Theoretical limits for storage of energy in buildings
A. Y. El-Assy and J. A. Clark (<i>U.S.A.</i>)	121 Thermal analysis of a flat-plate boiling collector having sub-cooled inlet and saturated exit states
K. O'Ferrall Lund (<i>U.S.A.</i>)	133 General thermal analysis of serpentine-flow flat-plate solar collector absorbers
W. T. Kierkus and W. G. Colborne (<i>Canada</i>)	143 Diffuse solar radiation—daily and monthly values as affected by snow cover
F. J. Collado and J. A. Turégano (<i>Spain</i>)	149 Calculation of the annual thermal energy supplied by a defined heliostat field
M. A. Zaman and B. K. Bala (<i>Bangladesh</i>)	167 Thin layer solar drying of rough rice
L. D. Jaffe (<i>U.S.A.</i>)	173 Test results on parabolic dish concentrators for solar thermal power systems
	189 ISES Conference Announcements
	191 Reviewers 1987–1988

VOLUME 42, NUMBER 3, 1989

Articles

L. Diabaté, G. Moussu, and L. Wald (<i>France</i>)	201 Description of an operational tool for determining global solar radiation at ground using geostationary satellite images
A. A. Ghoneim (<i>Egypt</i>)	209 Comparison of theoretical models of phase-change and sensible heat storage for air and water-based solar heating systems
J. A. Olseth and A. Skartveit (<i>Norway</i>)	221 Observed and modelled hourly luminous efficacies under arbitrary cloudiness
P. D. Lund (<i>Finland</i>)	235 A general design methodology for seasonal storage solar systems
A. Ecevit, A. M. Al-Shariah, and E. D. Apaydin (<i>Turkey</i>)	253 Triangular built-in-storage solar water heater
R. Levitan, H. Rosin, and M. Levy (<i>Israel</i>)	267 Chemical reactions in a solar furnace—direct heating of the reactor in a tubular receiver
H. R. Wilson and M. Hennies (<i>F.R.G.</i>)	273 Energetic relevance of solar spectral variation on solar cell short circuit current

VOLUME 42, NUMBER 4, 1989

Articles

- E. W. Grald and T. H. Kuehn** (U.S.A.) 281 Performance analysis of a parabolic trough solar collector with a porous absorber receiver
- B. Sørensen** (Denmark) 293 Experiments with energy storage in a high-latitude greenhouse
- H. Suehrcke and P. G. McCormick** (Australia) 303 The distribution of average instantaneous terrestrial solar radiation over the day
- S. Gupta** (India) 311 Scope for solar energy utilization in the Indian textile industry
- C. R. J. Cave and K. E. Cockshull** (U.K.) 319 The effect of using a venetian reflector assembly to improve winter light levels in a single-span glasshouse on the growth of a pot chrysanthemum crop
- A. W. Harrison and C. A. Coombes** (Canada) 327 Performance validation of the Perez tilted surface irradiance model
- K. G. T. Hollands, L. J. D'Andrea, and I. D. Morrison** (Canada) 335 Effect of random fluctuations in ambient air temperature on solar system performance
- M. C. Tleimat and E. D. Howe** (U.S.A.) 339 The use of energy from salt-gradient solar ponds for reclamation of agricultural drainage water in California: analysis and cost prediction
- D. L. Critten** (U.K.) 351 Theoretical design of non-focussed light concentrators based on an assembly of reflectors supported as in a Venetian blind

Letter to the Editor

- J. W. Spencer** (Australia) 353 Comments on *The Astronomical Almanac's Algorithm for Approximate Solar Position* (1950–2050).

Book Review

- J. Loferski** (U.S.A.) 355 *Solar Cells* by M. M. Koltun
- 357 *Books Received*

VOLUME 42, NUMBER 5, 1989

Articles

- S. Lingamurthy, V. Bhanumathi, B. Sethuram and T. Navaneeth Rao** (India) 359 Micellar effect on the reduction of fluorescein dyes by photogenerated ketyl radicals
- J. R. Hull and E. Nielsen** (U.S.A.) 365 Steady-state analysis of the rising solar pond

- | | | |
|--|-----|---|
| C. H. Strauss, S. C. Grado,
P. R. Blankenhorn and
T. W. Bowersox (U.S.A.) | 379 | Developing financial and energy accounting models for woody biomass systems |
| J. Wright, R. Perez and
J. J. Michalsky (U.S.A.) | 387 | Luminous efficacy of direct irradiance: variations with insolation and moisture conditions |
| R. Almanza, A. Martínez and
G. Segura (Mexico) | 395 | Study of a kaolinite clay as a liner for solar ponds |
| B. Berre (Norway) and
D. Lala (Sweden) | 405 | Investigation on photochemical dosimeters for ultraviolet radiation |
| Y. Castro-Diez, L. Alados-
Arboledas and
J. I. Jiménez (Spain) | 417 | A model for climatological estimations of global, diffuse, and direct solar radiation on a horizontal surface |
| F. J. Collado, A. Gómez
and J. A. Turégano | 425 | Errata |

VOLUME 42, NUMBER 6, 1989

Articles

- | | | |
|--|-----|--|
| Z. Zrikem and E. Bilgen
(Canada) | 427 | Annual correlations for thermal design of the composite wall solar collectors in cold climates |
| C. Gueymard (Canada) | 433 | A simplified model for the computation of radiation transmission through a series of semi-transparent plates |
| A. A. Ghoneim (Egypt)
and S. A. Klein (U.S.A.) | 441 | The effect of phase-change material properties on the performance of solar air-based heating systems |
| D. I. Stevens, J. E. Braun and
S. A. Klein (U.S.A.) | 449 | An effectiveness model of liquid-dessicant system heat/mass exchangers |
| S. A. M. Burek, B. Norton and
S. D. Probert (U.K.) | 457 | Transmission and forward scattering of insolation through plastic (transparent and semi-transparent) materials |
| M. A. Rosen and F. C. Hooper
(Canada) | 477 | A comparison of two models for the angular distribution of diffuse sky radiance for overcast skies |
| T. J. Lyons (Australia) | 483 | Mesoscale contribution to available wind power potential |
| P. D. Lund (Finland) | 487 | Effect of climate on major CSH PSS design parameters |
| S. A. Channiwala and
N. I. Doshi (India) | 495 | Heat loss coefficients for box-type solar cookers |

- R. H. B. Exell, C. Sorapipatana** 503 The relation between wind speeds at the surface
and **D. Sukawat** (*Thailand*) and above the boundary layer in Thailand and India
- R. A. Zakhidov** (*U.S.S.R.*) 509 Mirror system synthesis for radiant energy
concentration—an inverse problem
- I Volume 42, 1989—List of Contents and Author
Index